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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,004	10/02/2003	Thomas J. Ribarich	IR-2171 (2-3689)	9223

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EXAMINER

SAWHNEY, HARGOBIND S

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/678,004

Applicant(s)

RIBARICH, THOMAS J.

Examiner

Hargobind S. Sawhney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4-16 and 38-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-16 and 38-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The amendment filed on August 4, 2005 has been entered. Accordingly:

- Claims 1 and 38 have been amended; and
- Claims 3 and 17-37 have been canceled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1, 2, 4-16 and 38-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muessli (US Patent No.: 6,548,948 B1) in view of Mies et al. (WO 96/13048).

Hereinafter, Muessli (US Patent No.: 6,548,948 B1) will be referred as Muessli; and Mies et al. (WO 96/13048) will be referred as Mies.

Regarding claim 1, Muessli discloses a compact florescent lamp package (Figures 1-3) comprising:

- a base 10 electrically connectable to the electrical socket capable for receiving an ordinary incandescent lamp (Figure 3, column 4, line 9);

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- the base 10 including an open end 14, a closed end 13 and a wall 11 enclosing space (Figure 3, column 4, lines 35-37);
- a multi-chip module including a ballast circuit 40 on a circuit board 41 (Figure 3, column 4, lines 38-41);
- the multi-chip module being contained entirely within the space defined in the base 10 (Figure 3, column 4, lines 38 and 39), and the multi-chip module being electrically connected to the base 10 with the element 48 (Figure 3); and
- a fluorescent lamp 31 extending away from the base 10 (Figures 1-3), and operatively connected to the ballast circuit 40 (Figures 1 and 3, column 3, lines 66 and 67, and column 4, lines 1-4).

However, Muesli does not specifically teach a thermally conductive body disposed within the base, and further thermally connecting the base to said ballast circuit.

On the other hand, Mies disclose a compact fluorescent lamp package (Figure 1) comprising a base 3 housing ballast module B (Figure 1, page 3, lines 27 and 28). Mies further teaches the cavity space of the base 3 including thermally conductive body D for mechanical stability and improved thermal management (Figure 1, Page 2, lines 16-32). Additionally, Mies teaches the thermally conductive body thermally connecting the wall 6 of the screw base 3 to the ballast circuit directly (Figure 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the compact Fluorescent lamp package of Muesli by filling thermal

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epoxy compound as taught by Mies for benefit and advantage of efficient transfer of heat generated during operation to the outer casing, and thus improving efficiency and operational life of the device.

Regarding claims 2, 4-6, 9, 10, 12-16, Muessli in view of Mies discloses the compact florescent lamp package (Figures 1-3 and 8) comprising:

- a diffuser cover 1 enveloping the fluorescent lamp 30, and providing appearance of an ordinary incandescent lamp, and directly connected to the base 10 (Muessli, Figure 8, column 5, lines 54-56); the base 10 being an Edison screw base (Figures 1-3 and 8);
- the multi-chip module 40 mounted on a single circuit board 41 (Muessli, Column 4, lines 38-41);
- the ballast circuit 40 including elements mounted on both sides of the circuit board 41 (Muessli, Column 2, lines 63-65, and Column 4, lines 38-41);
- the thermally conductive body being a thermal epoxy (Mies, Figure 1, Page 2, lines 16-32);
- the circuit board 41 having its parameters conforming the base configuration (Muessli, Figure 3);
- the circuit board 41 being generally rectangular circuit board (Muessli, Figure 3);
- the wall of the base 11 serving as a connector connecting the lamp 31 to first pole of a power line and the closed end 12 of the base insulated from

- the wall, and further connecting to the second pole of the power line (Muessli, Figure 3, column 3, lines 60-65);
- the multi-chip module 40 electrically connected to the wall 11 of the screw base via a first wire 15 (Muessli, Figure 3, column 4, lines 24-28), and the multi-chip module 40 further electrically connected to a connector 13 via a second wire 49 (Muessli, Figure 3, column 3, lines 59-64);
 - the fluorescent lamp 30 connected to multi-chip module 40 via respective filament terminals 50 (Muessli, Figure 4, column 3, lines 8-12);
 - the multi-chip module 40 including a circuit board 41 with a heatsink 10 disposed on its surface , and the heatsink 10 – lamp base - being thermally connected through the circuit board 40 to the heat generating components including elements 43, 45 and 46 (Muessli, Figure 3, column 2, lines 9-14);

Regarding claims 7 and 8, each dependent on Claim 6, Muessli in view of Mies discloses the compact florescent lamp package comprising a circuit board carrying electronic components on its both sides. However, neither combined nor individual teaching of Muessli and Mies teaches specifically a circuit board carrying design dependent electronic components on one side, and the design-independent electronic components on another side opposing side.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to position design dependent electronic components on one side of the circuit board, and the design-independent electronic components on another side

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opposing side , since it has been held that rearranging parts of a prior art structure involves only routing skill in the art. Further rearrangement of electronic components would facilitate assembly of the device in an orderly manner.

Regarding Claim 11, dependent on Claim 1, Muessli in view of Mies discloses the compact florescent lamp package comprising a generally rectangular circuit board. However, neither combined nor individual teaching of Muessli and Mies teaches specifically a circular circuit board.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a generally circular circuit board instead of a generally rectangular one, since it has been held that a change in shape or configuration, without any criticality, is nothing more than one of numerous shapes that one of ordinary skill in the art.

Regarding claims 38-42, Muessli in view of Mies meets the limitations in similar manner as that detailed above for the rejections of claims 1, 2, 4, 6 and 9.

Response to Amendment

4. Applicant's arguments filed on September 17, 2002 with respect to the 35 U.S.C. 103(a) rejection of claims 1-3, 5-8, 10-17, 19, 21-23 and 25-28 have been fully considered but they are not persuasive.

Argument: Regarding each of claims 1 and 38, neither Muessli (US

Patent No.: 6,548,948 B1) nor Miles (WIPO Patent No.: WO

96/13048) teaches a direct thermal connection between the ballast and the screw base by a thermally conductive body.

Response: As detailed in section 3 above, Muessli in view of Mies discloses the compact florescent lamp package (Figures 1-3 and 8) comprising:

- the ballast circuit 40 including elements mounted on both sides of the circuit board 41 (Muessli, Column2, lines 63-65, and Column 4, lines 38-41); and
- the thermally conductive body D disposed around the ballast circuit B within the screw base 3, and the thermally conductive body D thermally connecting the wall 3 of the screw base to the ballast circuit B (Mies, Figure 1, Page 2, lines 16-32).

Argument: Regarding each of claims 1 and 38, Miles (WIPO Patent No.: WO96/13048) teaches a thermally conductive mass D, which is only in contact with plate P, and therefore, heat can only escape through plate 1.

Response: Miles (WIPO Patent No.: WO96/13048) teaches capsulation of the ballast circuit B by means of synthetic resin D, and setting of the synthetic resin forms thermally conducting connection between the ballast circuit and the housing Figure 1, Page 1, lines 21-27).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify the compact Fluorescent lamp package of Muessli by filling thermal epoxy compound as taught by Mies for benefit and advantage of efficient transfer of heat generated during operation to the outer casing, and thus improving efficiency and operational life of the device.

Thus, Muessli in view of Mies discloses the compact florescent lamp package meeting the limitations of each of the amended independent claims 1 and 38.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

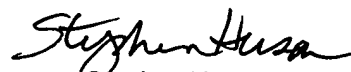
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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hargobind S Sawhney whose telephone number is 571 272 2380. The examiner can normally be reached on 6:15 - 2:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571 272 2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HSS
10/13/2005


Stephen Husar
Primary Examiner